

[Name of Document] Abstract

The present invention ensures a uniform concentration of a plasma excitation gas supplied to a plasma generation region while preventing the plasma excitation gas from turning into plasma before supply. In a plasma film forming apparatus for forming a film on a substrate using plasma, a flat-plate structure partitioning the inside of a processing container into two, upper and lower, regions is disposed between a high frequency wave supply unit and a substrate mounting unit in the processing container. The plasma excitation gas is supplied into the processing container from the lower side toward the region on the high frequency wave supply unit side, and the structure is formed with a source gas supply port for supplying a source gas for film formation in the region on the mounting unit side and an opening for allowing plasma generated in the region on the high frequency wave supply unit side to pass to the region on the mounting unit side.